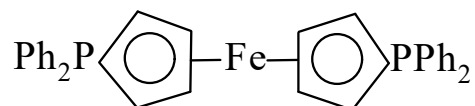




>>Entry Name: 1,1'-Bis(diphenylphosphino)ferrocene, 9Cl

Synonym(s): 1,1'-Ferrocenediylbis(diphenylphosphine), 8Cl



CAS Registry Number: 12150-46-8

Molecular Formula: C₃₄H₂₈FeP₂

Molecular Weight: 554.39

Accurate Mass: 554.101563

Percentage Composition: C 73.66%; H 5.09%; Fe 10.07%; P 11.17%

Source/Synthesis: Synth. from Fe(C₅H₄Li)₂ and Ph₂PCl

Use/Importance: Chelating ligand capable of supporting hydroformylations, cross coupling, allylation, carbonylative coupling and other catalytic processes employing Groups 9 and 10 transition metals

Physical Description: Air-stable white cryst. (C₆H₆/petrol or CH₂Cl₂/MeOH)

Melting Point: Mp 186-188°

Solubility: V. sol. CHCl₃, CH₂Cl₂, alcohols; sol. pentane; insol. H₂O

Aldrich: 17726-1

Fluka: 14816

Rare Chemicals Library: S44826-5

>>Derivative: Methiodide (1:2)

Synonym(s): 1,1'-Bis(methyldiphenylphosphonio)ferrocene diiodide. Ferrocene-1,1'-bis(methyldiphenylphosphonium) diiodide

Molecular Formula: C₃₆H₃₄FeI₂P₂

Molecular Weight: 838.268

Accurate Mass: 837.957459

Percentage Composition: C 51.58%; H 4.09%; Fe 6.66%; I 30.28%; P 7.39%

Physical Description: Orange cryst. (EtOH)

Melting Point: Mp 244-245°

>>Derivative: P-Oxide

CAS Registry Number: 32660-24-5

Molecular Formula: C₃₄H₂₈FeOP₂

Molecular Weight: 570.389

Accurate Mass: 570.096478

Percentage Composition: C 71.60%; H 4.95%; Fe 9.79%; O 2.80%; P 10.86%

Source/Synthesis: Synth. from the parent phosphine + CoCp(CO)₂

>>Derivative: P,P'-Dioxide

Synonym(s): 1,1'-Bis(diphenylphosphinyl)ferrocene, 10Cl

Molecular Formula: C₃₄H₂₈FeO₂P₂

Molecular Weight: 586.388

Accurate Mass: 586.091393

Percentage Composition: C 69.64%; H 4.81%; Fe 9.52%; O 5.46%; P 10.56%

Use/Importance: Ligand for Cr, Co, Cu, Mo, Ni, Ta, W and V

Physical Description: Dark orange cryst. (EtOH)

Melting Point: Mp 252-254.5°

>>Derivative: P,P'-Disulfide

Synonym(s): 1,1'-Bis(diphenylphosphinothiyl)ferrocene

Molecular Formula: C₃₄H₂₈FeP₂S₂

Molecular Weight: 618.522

Accurate Mass: 618.045703

Percentage Composition: C 66.02%; H 4.56%; Fe 9.03%; P 10.02%; S 10.37%

Physical Description: Golden-yellow cryst. (butanol)

Melting Point: Mp 244-246°